

APPENDIX FIVE

SUMMER KEY

Numbers at left are **paired** and give opposing characteristics to look for. Starting with numbers 1, select the description that fits your specimen and proceed to the number given on the right until the common group name (e.g. maple) is reached. Turn to the given page number for **species keys**. Use average material for analysis.

See Glossary - page 9.

Key

1.	Leaves are needle-, awl- or scale-like; conifers	2
1.	Leaves are broad and veined, not as above; hard-woods or broad-leaf trees	9
2.	Leaves needle-like	3
2.	Leaves awl- or scale-like, or both	7
3.	Leaves flat, tips blunt, and occur singly	4
3.	Leaves angular in cross section, tips pointed	5
4.	Leaves taper, twigs limber; cones shorter than 1 inch <i>Hemlock p. 24</i>	
4.	Leaves parallel-sided, twigs stiff; cones over 2 inches	<i>Fir p. 25</i>
5.	Leaves occur singly, never clustered	<i>Spruce p. 20</i>
5.	Leaves occur in clusters, also singly in larch	6
6.	Leaves in clusters of 2 to 5 with papery sheath at base ¹	<i>Pine p. 12</i>
6.	Leaves in clusters ² of 8 or more on spurs; papery sheath lacking	<i>Tamarack p. 19</i>
7.	Branchlets with prickly, awl-shaped leaves; cones are berry-like	
		<i>Juniper, Redcedar p. 28</i>
7.	Branchlets with scale-like leaves; leaves not prickly; cones un-berry-like	8
8.	Twigs flat; cones ablong, woody, up to $\frac{1}{2}$ inch; wood slightly aromatic ..	
		<i>Northern White-Cedar p. 27</i>
8.	Twigs slightly flattened; cones $\frac{1}{4}$ inch, rounded, leathery; wood strongly aromatic	<i>Atlantic White-Cedar p. 26</i>
9.	Leaves opposite, trees only	10
9.	Leaves alternate	15
10.	Leaves simple	11
10.	Leaves compound	13
11.	Leaf margin serrate	<i>Nannyberry p. 94</i>
11.	Leaf margin lobed or entire	12
12.	Leaf margin lobed	<i>Maple p. 80</i>
12.	Leaf margin entire	<i>Dogwood p. 98</i>
13.	Leaves palmate	<i>Horsechestnut p. 51</i>
13.	Leaves pinnate	14
14.	Leaflets 3-5, lobed, coarse teeth	<i>Boxelder p. 87</i>
14.	Leaflets 5-13	<i>Ash p. 89</i>
15.	Leaves simple	16
15.	Leaves compound	37
16.	Leaf margin entire, wavy, or lobed	17
16.	Leaf margin toothed or serrate	25
17.	Leaf margin entire	18
17.	Leaf margin wavy or lobed	21
18.	Leaves thin, veins parallel	<i>Dogwood p. 98</i>
18.	Leaves thick and leathery, net-veined	19
19.	Pith diaphragmed; leaves 2-5 inches long	<i>Tupelo p. 71</i>
19.	Pith not diaphragmed	20
20.	Leaves to 3 inches long	<i>Mountain-Laurel p. 99</i>
20.	Leaves 4-8 inches long	<i>Rhododendron p. 98</i>

¹ Papery sheath on white pine drops in late August

² Larch leaves are borne singly on elongating shoots.

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	Key
21.	Leaf margin wavy toward tip. Base of leaf one-sided . <i>Witch-Hazel p. 94</i>
21.	Leaf margin lobed or wavy throughout
22.	Leaf petiole hollow and covers bud; numerous main leaf veins radiate from base <i>Sycamore p. 66</i>
22.	Leaf petiole neither swollen nor hollow; leaves with one main vein
23.	Leaf tip flat or notched; pith diaphragmed
23.	<i>Tuliptree p. 48</i>
23.	Leaf tip not flat; pith solid
24.	Twigs angular; pith star-shaped
24.	<i>Oak p. 52</i>
24.	Twigs round, spicy odor and taste; leaves 0-3 lobed
24.	<i>Sassafras p. 65</i>
25.	Leaf margin singly toothed or serrate
25.	26
25.	Leaf margin doubly serrate
25.	32
26.	Teeth hooked, prominent; fruit a bur
26.	27
26.	Teeth not hooked, fruit not a bur
26.	28
27.	Pith star-shaped; buds blunt; bark brown
27.	<i>Chestnut p. 50</i>
27.	Pith round; buds long, pointed; bark gray
27.	<i>Beech p. 49</i>
28.	Leaf base one-sided, leaf cordate; pith not symmetrical . <i>Basswood p. 88</i>
28.	29
29.	Leaf base even; pith symmetric in cross section
29.	29
29.	Leaves long and narrow; petioles short without glands; buds with a single, cap-like scale
29.	<i>Willow p. 39</i>
29.	Leaves broad, or if narrow with glands on petiole; buds with several scales
29.	30
30.	Leaf petiole usually long, flat, except rounded in balsam poplar; pith star-shaped
30.	<i>Poplar p. 30</i>
30.	Leaf petiole short, not flat; pith round
30.	31
31.	Twigs pungent when broken; glands on petiole
31.	<i>Cherry, Plum p. 72</i>
31.	Twigs odorless; leaf petiole glandless; buds slender, twisted at tip, silky within
31.	<i>Serviceberry p. 69</i>
32.	Leaf base one-sided, surface sand-papery
32.	<i>Elm p. 62</i>
32.	Leaf base even, surface smooth
32.	33
33.	Branches with thorns 1 inch or more long
33.	<i>Hawthorn p. 68</i>
33.	Branches without thorns
33.	34
34.	Pith triangular; buds stalked, smooth
34.	<i>Alder p. 47</i>
34.	Pith not triangular; bud scales overlapping
34.	35
35.	Leaves hairy on both surfaces; pith green
35.	<i>Hop-Hornbeam p. 37</i>
35.	Leaves if hairy only so on one surface; bark smooth
35.	36
36.	Stem fluted; bark smooth, gun-metal gray
36.	<i>Hornbeam p. 38</i>
36.	Stem not fluted; bark white, yellow, or red to dark brown
36.	<i>Birch p. 40</i>
37.	Leaflets with margin entire
37.	38
37.	Leaflets with serrate margin
37.	39
38.	Twigs with paired spines; leaflets 7-19
38.	<i>Locust p. 79</i>
38.	Twigs spineless; leaflets 7-13; poisonous
38.	<i>Poison-Sumac p. 96</i>
38.	**
39.	Leaflets ½ inch long with fine, rounded teeth
39.	<i>Honeylocust p. 78</i>
39.	Leaflets over 1 inch long
39.	40
40.	Pith chambered or diaphragmed
40.	<i>Walnut/Butternut p. 34-35</i>
40.	Pith solid
40.	41
41.	Leaflets 5-7; pith star-shaped
41.	<i>Hickory p. 36</i>
41.	Leaflets 11-31
41.	42
42.	Twigs smooth; leaflets 11-17; buds large
42.	<i>Mountain-Ash p. 67</i>
42.	Twigs densely hairy; leaflets 11-31; buds small
42.	<i>Sumac p. 95</i>

** See also poison-ivy, page 97.